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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/256,896	02/24/1999	ALEXANDER THOEMMES	30566.60US01	1431

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EXAMINER

YANG, RYAN R

ART UNIT	PAPER NUMBER
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2672

DATE MAILED: 01/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/256,896

Applicant(s)

THOEMMES ET AL.

Examiner

Ryan R Yang

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is responsive to communications: Amendment, filed on 11/22/02.
This action is final.
2. Claims 1-38 are pending in this application. Claims 1, 13, 24, 35 and 36 are independent claims. In the Amendment, filed on 11/22/02, claims 1, 13, 24, 35 and 36 were amended, and claims 38 was added.
3. The present title of the invention is "Acquiring and unacquiring alignment and extension points" as filed originally.

Claim Rejections - 35 USC § 102

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claims 36 and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by Venolia (5,463,722).

As per claim 36, Kimble discloses a method of acquiring a data point of interest on a drawing object, comprising the steps of:

accepting a modifier command ("keyboard commands or menu selections for creating and breaking such multiple object alignments", column 22, line 9-11); and

acquiring the data point of interest on a drawing object in a computer-implemented drawing program after a command is received to move a cursor near the

data point, wherein the data point is not acquired without the modifier command (without pressing down the keyboard, the objects are not aligned).

6. As per claim 38, Venolia demonstrated all the elements as applied in the rejection of independent claim 36, supra, and further discloses the modifier command comprises the depression of a keyboard key ("keyboard commands or menu selections for creating and breaking such multiple object alignments", column 22, line 9-11).

Claim Rejections - 35 USC § 103

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 1, 2, 6-11, 13, 14, 18-22, 24, 25, 29-33, 35 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Venolia (5,463,722) in view of Kimble (6,031,531).

As per claim 1, Venolia discloses a method of acquiring a data point of interest on a drawing object, comprising the steps of:

accepting a command to move a cursor near the data point of interest on the drawing object in a computer-implemented drawing program (Figure 3); and

acquiring the data point after the cursor remains near the data point (Figure 3).

Venolia discloses a method of acquiring a cursor when moved within a distance. It is noted that Venolia does not explicitly disclose acquiring the data point after the cursor remains near the data point for an acquisition pause time, however, this is known

in the art as taught by Kimble. Kimble discloses acquiring a cursor after the cursor remains nears an object after a period of time (Figure 7 164, "By "dwelling on the icon/object (i.e., by not utilizing a switch or moving the cursor), the function associated with the icon/object upon which the cursor is "dwelling" is automatically activated", column 9, line 34-37).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kimble into Venolia because Venolia discloses a method of acquiring a cursor when the cursor is within a distance of an object and Kimble discloses a method of acquiring a cursor when the cursor is within a distance of an object after a period of time in order to easily access the object.

9. As per claim 2, Venolia and Kimble demonstrated all the elements as applied in the rejection of independent claim 1, supra, and Kimble further discloses the pause time is user-selectable ("The dwell time threshold may be adjusted by the user when configuring this particular feature", column 9, line 37-38).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kimble into Venolia because Venolia discloses a method of acquiring a cursor when the cursor is within a distance of an object and Kimble discloses a method of acquiring a cursor when the cursor is within a distance of an object after a period of user adjustable time in order to easily access the object.

10. As per claim 6, Venolia and Kimble demonstrated all the elements as applied in the rejection of independent claim 1, supra, and Kimble further discloses the step of

acquiring the data point after the cursor remains near the data point for an acquisition pause time comprises the step of acquiring the data point after the cursor remains within an acquisition distance of the data point for an acquisition pause time (Figure 7 154).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kimble into Venolia because Venolia discloses a method of acquiring a cursor when the cursor is within a distance of an object and Kimble discloses a method of acquiring a cursor when the cursor is within a distance of an object after a period of time in order to easily access the object.

11. As per claim 7, Venolia and Kimble demonstrated all the elements as applied in the rejection of claim 6, *supra*, and further discloses the acquisition distance is determined according to a parameter selected from a group comprising magnification of a view of the object; and an object type ("The amount of cursor movement necessary to trigger the hop can be adjustable by the user", column 9, line 24-26).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kimble into Venolia because Venolia discloses a method of acquiring a cursor when the cursor is within a distance of an object and Kimble discloses a method of acquiring a cursor when the cursor is within a user selectable distance of an object after a period of time in order to easily access the object.

12. As per claim 8, Venolia and Kimble demonstrated all the elements as applied in the rejection of independent claim 1, *supra*, and Kimble further discloses the step of

annotating the acquired data point with an acquisition indicator ("The icon is "magnetized" such that an area outlined by icon domain 65, with a diameter of perhaps two inches ... surrounds icon 70", column 7, line 33-37).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kimble into Venolia because Venolia discloses a method of acquiring a cursor when the cursor is within a distance of an object and Kimble discloses a method of annotating the acquired data point with an acquisition indicator in order to easily access the object.

13. As per claim 9, Venolia and Kimble demonstrated all the elements as applied in the rejection of independent claim 1, supra, and Kimble further discloses the step of unacquiring the data point after the cursor remains near the acquired data point for an unacquisition pause time ("the concept of "demagnetizing" an icon/object may be implemented", column 10, line 10-11).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kimble into Venolia because Venolia discloses a method of acquiring a cursor when the cursor is within a distance of an object and Kimble discloses a method of unacquiring a cursor when the cursor is within a distance of an object after a period of time in order to easily unaccess the object.

14. As per claim 10, Venolia and Kimble demonstrated all the elements as applied in the rejection of independent claim 1, supra, and Kimble further discloses the steps of:

accepting a command to move the cursor away from near the data point (Figure 7 152);

accepting a command to move the cursor near the data point (Figure 7 152); and unacquiring the data point after the cursor remains near the data point for the unacquisition pause time ("the concept of "demagnetizing" an icon/object may be implemented", column 10, line 10-11).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kimble into Venolia because Venolia discloses a method of acquiring a cursor when the cursor is within a distance of an object and Kimble discloses a method of unacquiring a cursor when the cursor is within a distance of an object after a period of time in order to easily unaccess the object.

15. As per claim 11, Venolia and Kimble demonstrated all the elements as applied in the rejection of independent claim 1, supra.

As for "the unacquisition pause time is a different value than the acquisition pause time", the requirement is inherent since the pause times need to be different to differentiate from the acquiring time.

16. As per claim 13, Venolia discloses an apparatus for acquiring a data point of interest on a drawing object, comprising:

means for accepting a command to move a cursor near the data point of the drawing object in a computer-implemented drawing program (Figure 1 1610).

Venolia discloses a method of acquiring a cursor when moved within a distance. It is noted that Venolia does not explicitly disclose the means for acquiring the data point after the cursor remains near the data point for an acquisition pause time, however, this is known in the art as taught by Kimble. Kimble discloses a means to

acquiring a cursor after the cursor remains nears an object after a period of time (Figure 7 164, "By "dwelling on the icon/object (i.e., by not utilizing a switch or moving the cursor), the function associated with the icon/object upon which the cursor is "dwelling" is automatically activated", column 9, line 34-37).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kimble into Venolia because Venolia discloses a method of acquiring a cursor when the cursor is within a distance of an object and Kimble discloses a method of acquiring a cursor when the cursor is within a distance of an object after a period of time in order to easily access the object.

Regarding the "means plus function" language, the means refer to the software methods executed on generically disclosed hardware explicitly disclosed by Kimble. It is further noted that both software and hardware means are functionally equivalent.

17. As per claims 14 and 18-22, these are directed to an apparatus for performing the method of dependent claims 2 and 6-10, and therefore are identically rejected to claims 2 and 6-10, respectively.

Regarding the "means plus function" language, the means refer to the software methods executed on generically disclosed hardware explicitly disclosed by Kimble. It is further noted that both software and hardware means are functionally equivalent.

18. As per claim 24, Venolia discloses a program storage device (Figure 1 1616), readable by a computer, tangibly embodying at least one program of instructions executable by the computer in a drawing program to perform method steps of acquiring

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a data point of interest on a drawing object (Figure 1 1610), the method comprising the steps of:

accepting a command to move a cursor near the data point of interest on the drawing object (Figure 1 1610).

Venolia discloses a method of acquiring a cursor when moved within a distance. It is noted that Venolia does not explicitly disclose acquiring the data point after the cursor remains near the data point for an acquisition pause time, however, this is known in the art as taught by Kimble. Kimble discloses acquiring a cursor after the cursor remains nears an object after a period of time (Figure 7 164, "By "dwelling on the icon/object (i.e., by not utilizing a switch or moving the cursor), the function associated with the icon/object upon which the cursor is "dwelling" is automatically activated", column 9, line 34-37).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kimble into Venolia because Venolia discloses a method of acquiring a cursor when the cursor is within a distance of an object and Kimble discloses a method of acquiring a cursor when the cursor is within a distance of an object after a period of time in order to easily access the object.

19. As per claims 25 and 29-33, these are directed to a program storage device, readable by a computer, since Venolia and Kimble's disclosure contain memory and control program (Figure 2 50 and 51), therefore they are similarly rejected as claims 2-10, respectively.

20. As per claim 35, Venolia discloses a method of unacquiring an acquired data point, comprising the steps of:

accepting a command to move a cursor near the acquired data point of a drawing object in a computer-implemented drawing program (Figure 3).

Venolia discloses a method of acquiring a cursor when moved within a distance. It is noted that Venolia does not explicitly disclose unacquiring the data point after the cursor remains near the acquired data point for an unacquisition pause time, however, this is known in the art as taught by Kimble. Kimble discloses unacquiring a cursor after the cursor remains nears an object after a period of time ("the concept of "demagnetizing" an icon/object may be implemented", column 10, line 10-11).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kimble into Venolia because Venolia discloses a method of acquiring a cursor when the cursor is within a distance of an object and Kimble discloses a method of unacquiring a cursor when the cursor is within a distance of an object after a period of time in order to easily unaccess the object.

21. As per claim 37, Venolia demonstrated all the elements as applied in the rejection of independent claim 36, supra.

Venolia discloses a method of acquiring a cursor when moved within a distance. It is noted that Venolia does not explicitly disclose acquiring the data point after the cursor remains near the data point for an acquisition pause time, however, this is known in the art as taught by Kimble. Kimble discloses acquiring a cursor after the cursor remains nears an object after a period of time (Figure 7 164, "By "dwelling on the

icon/object (i.e., by not utilizing a switch or moving the cursor), the function associated with the icon/object upon which the cursor is "dwelling" is automatically activated", column 9, line 34-37).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kimble into Venolia because Venolia discloses a method of acquiring a cursor when the cursor is within a distance of an object and Kimble discloses a method of acquiring a cursor when the cursor is within a distance of an object after a period of time in order to easily access the object.

Claim Rejections - 35 USC § 103

22. Claims 3-5, 12, 15-17, 23, 26-28 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Venolia and Kimble as applied to claim 1 above, and further in view of Newell et al. (5,123,087).

As per claim 3, Kimble demonstrated all the elements as applied in the rejection of independent claim 1, supra.

It is noted that Venolia and Kimble together do not explicitly disclose a linear entity, however, this is known in the art as taught by Newell et al., hereinafter Newell. Newell discloses an interactive method in which the graphic object is a linear object (Figure 2A 201).

Thus, it would have been obvious to one of ordinary skill in the art to incorporate the teaching of Newell into Venolia and Kimble because Venolia and Kimble disclose automatic snapping of the object with a curser dwell within a range of the range for a

time period and Newell disclose the object can be a linear object in order to make the application more versatile.

23. As per claim 4, Venolia, Kimble and Newell demonstrated all the elements as applied in the rejection of dependent claim 3, *supra*, and Newell further discloses the step of accepting a command to move the cursor away from the data point to extend the linear entity (Figure 10B 1003).

Thus, it would have been obvious to one of ordinary skill in the art to incorporate the teaching of Newell into Venolia and Kimble because Venolia and Kimble disclose automatic snapping of the object with a curser dwell within a range of the range for a time period and Newell disclose the object can be linear extended in order to make the application more versatile.

24. As per claim 5, Venolia and Kimble demonstrated all the elements as applied in the rejection of independent claim 1, *supra*.

Venolia and Kimble disclose automatic snapping of the object with a curser dwell within a range of the range for a time period. It is noted that Venolia and Kimble do not explicitly disclose the data point is selected from a group comprising: an endpoint; a midpoint; a node; a closest quadrant point; an insertion point; a point on a line tangent to the object; and a point on a line that forms a normal from the object, however, this is known in the art as taught by Newell. Newell discloses a computer based solid modeler in which points are used to define an object ("Interesting points are any geometric entity, parameter, or location which is of interest to the draftsman; types include midpoints,

endpoints, intersections, vertices, tangents, perpendiculars, arc centers, and arc quadrant points", column 4, line 45-49).

Thus, it would have been obvious to one of ordinary skill in the art to incorporate the teaching of Newell into Venolia and Kimble because Venolia and Kimble disclose a method of snapping an object and Newell discloses ways to define an object in order to make the object more versatile.

25. As per claim 12, Venolia and Kimble demonstrated all the elements as applied in the rejection of independent claim 1, *supra*.

Venolia and Kimble disclose automatic snapping of the object with a curser dwell within a range of the range for a time period, it is noted that Venolia and Kimble do not disclose the step of "accepting a command to move the cursor near a second data point on a second object; acquiring the second data point after the cursor remains near the second data point for the acquisition pause time; and aligning the first object and the second object according to the acquired first data point and the acquired second data point, however, this is known in the art as taught by Newell. Newell discloses an alignment method by selecting two intended object (see Figure 20S).

Thus, it would have been obvious to one of ordinary skill in the art to incorporate the teaching of Newell into Venolia and Kimble in order to easily align two objects.

26. As per claims 15-17 and 23, since these are directed to an apparatus for performing the method of dependent claims 3-5 and 12, therefore are similarly rejected as claims 3-5 and 12, respectively.

Regarding the "means plus function" language, the means refer to the software methods executed on generically disclosed hardware explicitly disclosed by Venolia, Kimble and Newell. It is further noted that both software and hardware means are functionally equivalent.

27. As per claims 26-28 and 34, since Kimble's disclosure contain memory and control program (Figure 2 50 and 51), they are directed to a program storage device, readable by a computer, therefore are identically rejected as claims 3-5 and 12, respectively.

Response to Arguments

28. Applicant's arguments with respect to claims 1,13,24,35 and 35 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

29. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

30. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Inquiries

31. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Ryan Yang** whose telephone number is **(703) 308-6133**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Michael Razavi**, can be reached at **(703) 305-4713**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

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or faxed to:

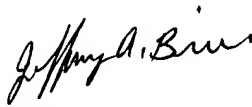
(703) 872-9314 (for Technology Center 2600 only)

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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 305-47000377.

Ryan Yang
January 12, 2003


JEFFERY BRIER
PRIMARY EXAMINER